INFO 490C: Introduction to Social & Cultural Analytics Spring 2022

Instructor: Laure Thompson, laurejt@cs.umass.edu

TA: Chloe Eggleston, ceggleston@umass.edu

Lecture: MWF 1:25-2:15pm in LGRT 123

Office Hours: All office hours will be held virtually on Zoom. See Moodle for details.

Course Description. This course introduces the use of computational methods for studying culture and society. We will learn how to transform textual and visual material into data, and how we can explore and analyze this data using machine learning and statistical models as both quantitative and qualitative tools. We will also survey and discuss how these methods are applied within the humanities and social sciences, as well as reflect on the challenges, limitations, and ethical issues that arise in the computational study of culture and society. 3 Credits.

Course Prerequisites. INFO 248 or Permission of Instructor.

Course Goals. Through this course students will:

- become familiar with computational methods for studying culture and society;
- be able to construct nuanced arguments using data and computational methods;
- gain an understanding of when a computational method is both applicable and useful (and when it's not), as well as how to critically interpret its output;
- develop proficiency in using Python for analyzing social and cultural data;
- be able to conduct computer-assisted scholarship in conjunction with faculty.

Course Platforms. We will use

- **Moodle** to (1) host all course content including readings, in-class notes, and assignment details), (2) post course announcements, (3) collect assignments, and (4) track grades.
- **Piazza** for Q&A. Please use private posts for general communication with course staff. For private/sensitive issues, email Prof. Thompson directly.
- **Zoom** for office hours.

Links for each of these will be shared via Moodle.

Course Materials. This course has no required textbook. Readings for this course will largely be available online and will otherwise be made available via Moodle.

Below are several textbooks that might be useful to consult. These texts are entirely *optional*; they are *not* needed to succeed in this course but are suggested as complementary resources.

 Karsdorp, Kestemont, & Riddel. Humanities Data Analysis. An open access, interactive Jupyter Notebook version of this text is available at https://humanitiesdataanalysis.org.

- Arnold & Tilton. Humanities Data in R.
- Jockers & Thalken. Text Analysis with R.

Schedule. A typical week will have assigned *technical* and *discussion* readings. Technical readings will introduce the week's technical concepts and should be read by Monday's class session. Monday and Wednesday class sessions will expand on these concepts through a mixture of instructor-led discussion and in-class programming activities. Discussion readings will focus on how these technical concepts are used in the wild to study culture and society. We will use Friday's class session to discuss these readings. To prepare for this in-class discussion, a reading response must be submitted Friday morning.

Laptops. Please bring laptops to class. They will be needed to complete in-class activities. Working on these activities in pairs will be encouraged.

Assignments & Grading.

```
Grading Scale. F = <63.50, D = 64-66, D + = 67-69; C - = 70-73, C = 74-76, C + = 77-79; B - = 80-83, B = 84-86, B + = 87-89; A - = 90-93, A = >93.49
```

Assignment Categories & Weights.

- In-Class Assignments 40%
- Reading Responses 20%
- Final Project 30%
- Course Reflection 5%
- Participation 5%

Reading Responses.

For each week's discussion readings, you will submit a reading response by Friday morning (11:59am ET). These responses will be guided by a short prompt and must be at least 300 words long. These posts will be graded on a scale of \times , \checkmark -, \checkmark +.

In-Class Assignments.

Each week, we will provide in-class assignments that you will work on during Monday and Wednesday class sessions. These assignments will contain a mixture of programming and short written responses (the ratio will vary by week). During class, we encourage you to work on these assignments with your classmates; programming exercises can be completed via pair programming and written questions can be discussed. These collaborations must be documented, and all written responses must be written in your own words. These assignments may require more time than class allows. You will complete this work on your own and submit it by the following Monday (11:59pm ET). These assignments will be graded on a scale of \times , \checkmark -, \checkmark , \checkmark +. Update: This category also includes Mini Project 1.1.

Final Project.

You will complete a final project on a topic and dataset of your choosing. Your topic must be connected to the humanities or humanistic social sciences, and your dataset must include a collection of texts or images along with other metadata. In this project, you will propose a research question that you will operationalize using computational methods covered in this course. This project will be broken into several components including a project proposal, progress report, final presentation, and final report. Projects may be completed individually or in pairs.

Course Reflection.

In lieu of a final exam, you will write a reflection on your learning and experiences in this course.

Participation.

Your participation is crucial for in-class discussions and activities to be successful and effective. While attendance is a necessary prerequisite for participation, participation is much more than simply being present in the classroom; it means actively engaging in in-class discussions and activities.

Policies.

Attendance Policy.

In light of the ongoing pandemic, an unlimited number of absences is permitted. All but three of these will require emailing an explanation to Prof. Thompson. In other words, you have three no-questions-asked absences, but any additional unexplained absences will negatively affect your Participation grade. When possible, please send an email to Prof. Thompson *in advance*. **Do not come to class if you are feeling unwell.**

Late Attendance Policy.

It is important to arrive on time to class. Late arrivals can be disruptive and can impede not only your own learning but others' as well. Arriving to class 10+ minutes late (without forewarning) will be counted as an absence.

Late Work Policy.

Listed below are the blanket late policies for this course. If you should need an extension, please contact Prof. Thompson in advance to discuss your situation. In case of unforeseen circumstances (e.g. illness, internet issues, personal emergency), contact Prof. Thompson as soon as possible.

- Reading Responses. Late responses will not be accepted. Your lowest graded response will be dropped.
- In-Class Assignments. Late responses will not be accepted. Your lowest grade assignment will be dropped.
- Final Project. Project deliverables will not be accepted late.
- Course Reflection. Late submissions will not be accepted.

Participation Policy.

Regular class participation is crucial to success in this course. Likewise, all participants in this course are expected to work together to foster a safe learning space that enables everyone to succeed. This means taking care with comments made during class as well as on online course platforms. When asked to provide constructive feedback, do so in ways that are specific to the task at hand and focused on the work itself. Do not comment on other students' personalities, abilities, beliefs, attitudes, identities, or backgrounds. Participation in this course should add to, not take away from, the learning experience for others.

Remember that even in face-to-face class discussions where everyone is working hard to be kind and thoughtful, misunderstandings still happen. Intent is very difficult to convey in writing online, and all of us must work together to make sure we take even more care in crafting our online written comments so that we are treating each other the way we want to be treated.

Disagreement, constructive criticism, and different perspectives are all healthy parts of the learning process, and they are welcome here, but be mindful of the humanity of your classmates. Not all topics are appropriate to debate in this class, and some of the topics of this course will impact different people in different ways.

Accommodation Statement.

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements. For further information, please visit Disability Services (https://www.umass.edu/disability/)

Academic Honesty Statement.

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent (https://www.umass.edu/dean_students/codeofconduct/acadhonesty/).

Inclusion Policy.

In this course, each voice has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support UMass Amherst's commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disability, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

I reserve the right to modify this syllabus as needed to account for current events and to better support student learning.

Acknowledgements.

This course and syllabus are inspired by those of David Bamman, Lauren F. Klein, David Mimno, Michelle Trim, Melanie Walsh, and Matthew Wilkens.